CLAIMS

1. An automated process for producing a range of grain based baked food products from a supply of raw materials comprising:

storing a plurality of recipes for producing a plurality of baked food products in a process control unit;

providing a customer interface for inputting a customer order, including entry of quantity of units, a customer recipe or selection of one of said plurality of recipes;

initializing a dough making apparatus and directing the dough making apparatus with said process control unit to feed raw ingredients from storage devices into said mixing apparatus to mix the ingredients according to said recipe selected;

controlling the dough making apparatus with the process control unit to sequentially deliver said mixture of ingredients to a baking station for a predetermined time to produce a finished product; and

delivering said finished product.

2. The automated process of Claim 1, wherein said customer interface includes a telephonic interface for receiving customer input from a telephone.

3. The process of claim 1, after said providing step further comprising the step of:

entering an order with a remote computer through said customer interface.

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1   4. The process according to claim 1 further comprising the step of

2   separately delivering water to said raw ingredients during said mixing step.

1   5. The process according to claim 1 further comprising the step of

2   extruding the mixture of ingredients after mixing the ingredients.

1   6. The process according to claim 1 further comprising the step

2   proofing said mixture of ingredients before delivering said mixture to said

3   baking station.

1   7. The process according to claim 1 further comprising the step of

2   grinding said at least one grain drawn from a said grain storage bin before mixing

3   said ingredients.

1   8. The process according to claim 1 further comprising the step of

2   providing a plurality of mixing chambers for separately mixing a like plurality

3   of ingredient mixtures, each of said ingredient mixtures being different from

4   any other of said ingredient mixtures.

1   9. The process according to claim 8 further comprising the step of

2   providing a plurality of ovens for separately baking each said ingredient

3   mixture drawn from said plurality of mixing chambers.

10. An automated process for producing a range of baked food products from a supply of raw materials in a retail store;

storing a plurality of recipes for producing a plurality of baked food products in a process control unit;

providing a customer interface for inputting a customer order, including entry of quantity of units, delivery time, a customer recipe or selection of one of said plurality of recipes;

computing a production time length and a production start time by subtracting said predetermined production time length from said customer selected delivery time;

initializing a dough making apparatus at said start time and directing the dough making apparatus with said process control unit to feed raw ingredients from storage devices into said mixing apparatus to mix the ingredients according to said recipe selected;

controlling the dough making apparatus with the process control unit to sequentially deliver said mixture of ingredients to a baking station for a predetermined time to produce a finished product; and

delivering said baked product at said predetermined delivery time.

11. The automated process of claim 11, wherein said controlling step further comprises delivering said mixture to a proofing station before delivering the mixture to a baking station.

12. A machine for producing a wide range of baked food products from a supply of raw materials comprising:

a process control unit;

means for inputting a plurality of recipes to said process control unit;

means for selecting a delivery time;

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6   a customer interface with said process control unit for selecting one of

7   said plurality of recipes and said delivery time;

8   a plurality of storage bins for holding said raw material;

9   means for feeding one or more of said raw materials from said plurality

10   of bins to a mixing means to form a mixture according to said selected recipe

11   as determined by said process control unit;

12   means for initiating said means for feeding at a predetermined

13   production time before said delivery time in accordance with said recipe

14   selected;

15   at least one oven for baking said mixture;

16   means for delivering said mixture to said at least one oven;

17   a delivery station for delivering a baked product from said oven at said

18   predetermined delivery time.

1   13.   The machine according to claim 12, wherein said customer

2   interface further comprises a data port adapted to receive input from a remote

3   location.

1   14. The machine according to claim 12 further comprising a proofing

2   station adapted to receive said mixture from said means for feeding.